UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

20995

7590

11/12/2009

KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614

EXAMINER				
EOFF, ANCA				
ART UNIT	PAPER NUMBER			
1705				

DATE MAILED: 11/12/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,405	04/30/2007	Hideo Hada	SHIGA7.048APC	2382

TITLE OF INVENTION: RESIST COMPOSITION AND METHOD FOR FORMING RESIST PATTERN

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

ap in m

appropriate. All further	correspondence including ed below or directed oth	ng the Patent, advance o	rders and notification of nation a) specifying a new corres	naintenance fees wi	ill be mailed to	the current c	orrespondence address as
		ock 1 for any change of address)	Note Fee(pape have	e: A certificate of r s) Transmittal. This ers. Each additional e its own certificate	nailing can only certificate cann paper, such as a of mailing or tra	be used for ot be used for an assignment usmission.	domestic mailings of the r any other accompanying t or formal drawing, must
2040 MAIN STI FOURTEENTH	RTENS OLSON (REET FLOOR	v2009 & BEAR LLP	I he	Cert	ificate of Mailir	ng or Transm	
IRVINE, CA 92	614						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DO	CKET NO.	CONFIRMATION NO.
10/576,405	04/30/2007	•	Hideo Hada	•	SHIGA7.04	8APC	2382
TITLE OF INVENTION	: RESIST COMPOSITION	ON AND METHOD FOR	R FORMING RESIST PAT	TERN			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL	FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$ 0		\$1810	02/12/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
EOFF,		1795	430-270100				
1. Change of corresponde	ence address or indicatio	n of "Fee Address" (37	2. For printing on the p	atent front page, list	:		
CFR 1.363). Change of corresp	ondence address (or Cha	inge of Correspondence	(1) the names of up to or agents OR, alternative	3 registered patent velv.	attorneys 1_		
Tree Address" ind	ondence address (or Cha 3/122) attached. ication (or "Fee Address)2 or more recent) attach	" Indication form	(2) the name of a single registered attorney or a 2 registered patent atto- listed, no name will be	e firm (having as a gent) and the name rneys or agents. If n	s of up to		
		A TO DE DDINTED ON	THE PATENT (print or typ				
			data will appear on the pa T a substitute for filing an	*	e is identified b	elow, the do	cument has been filed for
recordation as set fort (A) NAME OF ASSIG		pletion of this form is NO	T a substitute for filing an (B) RESIDENCE: (CITY				
(A) WEVEL OF TISSIN	SILL		(b) RESIDENCE: (CIT I	and STATE OR CO	JONIKI)		
			_	_			_
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual 🖵 Co	rporation or othe	r private grou	p entity 🚨 Government
4a. The following fee(s)	are submitted:	41	b. Payment of Fee(s): (Plea	se first reapply an	y previously pa	id issue fee sl	nown above)
Issue Fee	Jo small entity discount p	parmittad)	☐ A check is enclosed.☐ Payment by credit car	d Form PTO 2028	is attached		
	# of Copies		☐ The Director is hereby	authorized to charg	e the required fe	ee(s), any defi	ciency, or credit any
5 Change in Entity Sta	tura (frame atatua in dianta	d aborra)	overpayment, to Depo	sit Account Number	r	_ (enclose an	extra copy of this form).
5. Change in Entity Sta a. Applicant claim	s SMALL ENTITY state		☐ b. Applicant is no long	ger claiming SMAL	L ENTITY statu	ıs. See 37 CFI	R 1.27(g)(2).
NOTE: The Issue Fee an	d Publication Fee (if req		d from anyone other than the	he applicant; a regis	tered attorney or	agent; or the	assignee or other party in
increst as shown by the	records of the elined sta	acs ratem and rrademark	Come.				
Authorized Signature				Date			
Typed or printed nam	e			Registration No	0		
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but irginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR 2 USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor er, U.S. Patent and T D THIS ADDRESS.	ne public which in inutes to complor in the a frademark Offic SEND TO: Con	s to file (and lete, including mount of time, U.S. Depar mmissioner for	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,405	04/30/2007 Hideo Hada		SHIGA7.048APC	2382
20995 75	590 11/12/2009		EXAM	INER
KNOBBE MAR	TENS OLSON & BE	EOFF,	ANCA	
2040 MAIN STRE			ART UNIT	PAPER NUMBER
FOURTEENTH FI IRVINE, CA 9261			1795	
IN VINE, CA 92014			DATE MAILED: 11/12/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
Al-CCAU	10/576,405	HADA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	ANCA EOFF	1795	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS Is herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.37	S (OR REMAINS) CLOSED 5) or other appropriate com RIGHTS. This application i) in this application. If not included munication will be mailed in due cou	rse. THIS
1. This communication is responsive to <u>06/25/2009</u> .			
2. 🔀 The allowed claim(s) is/are <u>9-18 and 21-24</u> .			
3. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the:	, ,	d) or (f).	
1. Certified copies of the priority documents have		Cam Na	
2. Certified copies of the priority documents ha			C (1
3. Copies of the certified copies of the priority d	ocuments have been recer	ved in this national stage application	from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		file a reply complying with the require	∍ments
4. A SUBSTITUTE OATH OR DECLARATION must be sub INFORMAL PATENT APPLICATION (PTO-152) which gi			CE OF
5. CORRECTED DRAWINGS (as "replacement sheets") m	ust be submitted.		
(a) ☐ including changes required by the Notice of Draftspe	rson's Patent Drawing Rev	iew (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date	<u>_</u> .		
(b) ☐ including changes required by the attached Examine Paper No./Mail Date	r's Amendment / Comment	or in the Office action of	
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in			k) of
 DEPOSIT OF and/or INFORMATION about the dep attached Examiner's comment regarding REQUIREMEN 			the
Attachment(s)	- -		
1. Notice of References Cited (PTO-892)		Informal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948		Summary (PTO-413), o./Mail Date	
3. Information Disclosure Statements (PTO/SB/08),	7. ⊠ Examine	r's Amendment/Comment	
Paper No./Mail Date <u>07/24/2009</u> , <u>08/06/2009</u> 4. Examiner's Comment Regarding Requirement for Deposit	8 🕅 Fxamine	r's Statement of Reasons for Allowar	nce
of Biological Material	9. ☐ Other		
/Anca Eoff/	/Cynthia H K		
Examiner, Art Unit 1795	1 7	Patent Examiner, Art Unit 1795	

Application/Control Number: 10/576,405 Page 2

Art Unit: 1795

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Neil Bartfeld on November 04, 2009.

The application has been amended as follows:

In claim 9, on line 9, delete "[Formula 2]".

In line 9, on line 19, delete "[Formula 1]".

In line 13, on line 8, delete "[Formula 1]".

2. The following is an examiner's statement of reasons for allowance:

Hatakeyama et al. (US Pg-Pub 2003/0207201) fail to teach a resin component (A) having a molecular weight of no more than 7,500 and comprising the units (a1), (a2) and (a3) of claim 9 of the instant application.

There is no prior art teaching that would motivate one of ordinary skill in the art to modify Hatakeyama et al. and obtain the invention claimed in claims 9-12 and 24.

Uetani et al. (US Pg-Pub 2001/0014428) fail to teach the combination of the There is no prior art that would motivate one of ordinary skill in the art at the time

of the invention to modify Uetani et al. and obtain the invention claimed in claims 13-18.

Hada et al. (US Pg-Pub 2007/0065748) teach a resist composition comprising a resin and a photoacid generator of formula:

Application/Control Number: 10/576,405 Page 3

Art Unit: 1795

The resin is a copolymer of norbornanelactone methacrylate/2-ethyl-2-adamantyl methacrylate/3-hydroxy-1-adamantyl methacrylate with a molecular weight of 6,400 (see Examples 5 and 7 in par.0178-0182).

However, Hada et al. is not available as prior art for the instant application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANCA EOFF whose telephone number is (571)272-9810. The examiner can normally be reached on Monday-Friday, 6:30 AM-4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 10/576,405 Page 4

Art Unit: 1795

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. E./ Examiner, Art Unit 1795

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1795